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(74) Agents: HAMMER, Catriona, MacLeod et al.; Amersham plc, Amersham Place, Little Chalfont, Buckinghamshire HP7 9NA (GB).

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(71) Applicant (for all designated States except US): AMERSHAM BIOSCIENCES UK LIMITED [GB/GB]; Amersham Place, Little Chalfont, Buckinghamshire HP7 9NA (GB).

(72) Inventor; and

(75) Inventor/Applicant (for US only): COTTON, Graham [GB/GB]; Albachem Limited, Elvington Science Centre, By Gladsmuir, Lothian EH33 1EH (GB).

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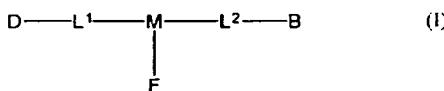
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(54) Title: SITE-SPECIFIC LABELLING OF PROTEINS USING CYANINE DYE REPORTERS



(57) **Abstract:** Disclosed are compounds of formula (I): in which D is a dye selected from a cyanine dye or a derivative thereof; B is an affinity tag; F comprises a target bonding group selected from a carboxylic acid thioester group and a 1,2-aminothiol group; M is a group adapted for attaching to F; and L<sup>1</sup> and L<sup>2</sup> each independently comprise a group containing from 1 to 40 linked atoms selected from carbon atoms which may optionally include one or more groups selected from -NR<sup>1</sup>-, -O- , -CH=CH- , -CO-NH- and phenylenyl groups, where R<sup>1</sup> is selected from hydrogen and C<sub>1</sub> - C<sub>4</sub> alkyl. The invention also relates to methods that afford direct attachment of the cyanine dye reporter group to either the N-terminus or C-terminus of a synthetic or recombinant peptide or protein, and their derivatives, in a site-specific manner, coupled with purification of the resultant labelled molecule.

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